

**DRAFT SCREENING SITE INVESTIGATION
FOR THE
ATLANTIC METALS CORPORATION SITE
2117 EAST YORK STREET
PHILADELPHIA, PENNSYLVANIA
ECKEL SITE NUMBER 305**

Prepared for

U.S. Environmental Protection Agency Region 3
Hazardous Site Cleanup Division
1650 Arch Street
Philadelphia, PA 19103

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1.0 INTRODUCTION

Under Remedial Action Contract (RAC) No. 68-S7-3002, Work Assignment No. 048-PAPA-03ZZ, U.S. Environmental Protection Agency (EPA) Region 3 tasked Tetra Tech, Inc. (Tt), to assist EPA Region 3 in the assessment of properties suspected to have been former lead smelter foundries. Tt subcontracted completion of this work assignment to Tetra Tech EM Inc. (Tetra Tech).

Former lead smelter sites nationwide were identified in an April 2001 article published in the American Journal of Public Health by Eckel, and others (Eckel study) (Reference [Ref.] 1). The majority of these lead smelters operated prior to 1964 and closed before the current environmental regulations were instituted. As part of the Eckel study, soil samples were collected from several of the identified former lead smelter properties. Results from the analysis of these soil samples indicated that concentrations of lead exceeded EPA's recommended screening level for lead in residential soils. The results of the Eckel study indicate that the air disposition of lead into soils from the former smelter operations may present an ongoing public health concern due to exposure of residential populations, especially children, located in the vicinity of these former lead smelters, to soils containing elevated concentrations of lead (Refs. 1, 2, and 3).

The Eckel study identified 77 properties that may have been formerly used as lead smelters within EPA Region 3 (Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia). EPA Region 3 is currently investigating these 77 properties. The objective of EPA's investigation of these properties is to (1) determine the potential for lead-contaminated soil to be present at the former lead smelter site or nearby properties (2) identify any populations that may be at risk to exposure to this soil, and (3) determine if soil sampling is warranted at any of these sites or nearby properties.

The following activities were completed as part of the initial screening investigation of each of these former lead smelter sites: (1) verify the former lead smelter address listed in the Eckel

study through historical Sanborn fire insurance maps, tax parcel information, and/or contacting local agencies, (2) determine if the site is listed in EPA's Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) database, (3) determine through census information and existing maps the number of schools, daycare centers or recreational parks that exist near the former lead smelter site, (4) determine the population residing within a 4-mile radius of the site, (5) conduct a windshield reconnaissance of the site and surrounding area to document the current land use, identify any exposed soil and verify the existence of any schools, daycare centers or parks in the immediate area, and (6) review all information acquired to determine if the collection and analysis of soil samples is warranted at the site or at any nearby property.

This report summarizes the findings of the tasks outlined above for the former lead smelter known as the Atlantic Metals Corporation site located at 2117 East York Street, Philadelphia, Pennsylvania, 19125. Each former smelter property was given a number in Eckel's study. The Eckel study number for this site is 305 (Ref. 1).

2.0 SITE LOCATION

The former Atlantic Metals Corporation facility was located at 2117 East York Street, Philadelphia, Pennsylvania, 19125. The geographic coordinates of the former Atlantic Metals Corporation facility are 39° 58' 55" north latitude and 75° 7' 39" west longitude on the Philadelphia, Pennsylvania Quadrangle, 7.5 minute series, United States Geological Survey topographic map (see Appendix A, Figure 1). The site is not currently listed in EPA's CERCLIS database (Ref. 4). An aerial photograph of the vicinity of the former lead smelter site has been included in Appendix A, Figure 2. This aerial photograph reveals the exposed soils and any identified areas of potential concern such as schools, daycare centers, or parks located within a half-mile radius of the site.

3.0 SITE OBSERVATIONS

On December 16, 2005, Tetra Tech completed a non-sampling windshield reconnaissance of the Atlantic Metals Corporation site and surrounding area. A photographic record of the current site conditions is included in Appendix B. Figure 3, shows the current layout of the site and surrounding area as observed during Tetra Tech's site reconnaissance. The following observations were recorded:

- The site is located in the Kensington area of north Philadelphia in a primarily residential area.
- The former lead smelter buildings are still visible on the property. Residents of the area indicated that the building currently occupying 2117 East York Street was the office building associated with the lead smelter, and that the actual smelter was located on the south side of the 2400 block of Martha Street. Residents reported that the smelter building has been condemned by the City of Philadelphia and is scheduled to be demolished.
- The former smelter property is predominantly covered in asphalt and concrete; however, vegetation was observed in various locations on the property; therefore, these areas are assumed to be covered in soil.
- Directly surrounding the former lead smelter property, to the north are commercial buildings and residential dwellings, to the south at York Street are a few smaller industrial buildings surrounded by residential homes on both sides of York Street, to the east of the lead smelter property is an open lot covered in vegetation, and to the west is a commercial building. The surrounding area is primarily occupied by two and three story residential row homes.

- Small areas of exposed soils were observed in the residential areas directly surrounding the site.
- No schools, parks, or daycare facilities were identified in the immediate vicinity of the site.

4.0 POTENTIAL TARGETS

Potential targets identified that may be exposed to lead-contaminated soils remaining in the vicinity of the former Atlantic Metals Corporation site include the nearby residential population and any workers that may be involved with the demolition of the buildings on the property. The residential population within a 4-mile radius of the site is summarized in the table below (Ref. 5).

Population Within a Four-mile Radius of the Site

Distance Ring (miles)	Population (number of persons)
0.0 to 0.25	4,020
0.25 to 0.5	13,800
0.5 to 1.0	45,088
1.0 to 2.0	113,809
2.0 to 3.0	184,503
3.0 to 4.0	261,207

Source: U.S. Department of Commerce. Landview V Environmental Mapping Software based on the Bureau of Census 2000 Population Data. December 6, 2005.

No parks, schools or daycare centers have been identified in the area directly surrounding the site. Five schools have been identified within one-half mile of the site, including the Hackett School, Miller School, Hunter School, Brown School, and Saint Annes School. Norris Square Park to the west, Cione City Park to the east, and two unnamed park areas to the south were identified within one half mile of the site.

5.0 FINDINGS AND RECOMMENDATIONS

The site is located in the Kensington area of north Philadelphia in a mixed commercial, industrial, residential area. Exposed soils were observed on the property formerly used as a lead smelter and in the nearby vicinity. No parks, schools, or daycare facilities were identified in the immediate vicinity of the site. The former lead smelter property should be sampled prior to any demolition activities commencing to determine if elevated lead levels exist. In addition, the former lead smelter property is located in a predominately residential area; therefore, to determine if there is a threat to the residential population from elevated levels of lead in soils, it is recommended that soil samples be collected from nearby residential yards and analyzed for lead levels.

REFERENCES

1. Eckel, W.P., Rabinowitz, M.B., Foster, G.D. American Journal of Public Health.
“Discovering Unrecognized Lead-Smelting Sites by Historical Methods”. April 2001.
2. Pennsylvania Department of Health. Suspected Former Lead Smelter Sites: A Potential Risk Factor for Childhood Lead Poisoning. August 2004.
3. U.S. Environmental Protection Agency (EPA). Revised Interim Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities. OSWER Directive 9355.4-12. July 14, 1994.
4. U.S. EPA. Comprehensive Environmental Response, Compensation, and Liability Act Information System (CERCLIS) database. On-Line Address:
<http://cfpub.epa.gov/supercpad/cursites/srchsites.cfm>
5. U.S. Census Bureau. State and County Quick Facts. Accessed On-Line on December 6, 2005. On-Line Address: quickfacts.census.gov/qfd/states/42.html.

Appendix A

Figures



Atlantic Metals Corporation
2117 East York
Philadelphia, Pennsylvania
Eckel Site No. 305

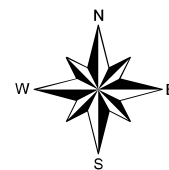


Figure 2
Aerial Photograph



Source: Modified from USGS, 2002, and ESRI, 2005.



Legend

- Pervious Surface
- Buildings

0 50 100
Feet
Scale in Feet

Atlantic Metals Corp.
2117 East York
Philadelphia, Pennsylvania
Eckel Site No. 305

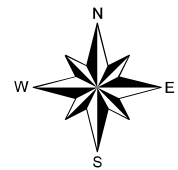


Figure 3
Site Layout Map



Source: Modified from the City of Philadelphia 1996, 2000, and 2003.

Appendix B
Photographic Documentation



Photographic Documentation

Site Name: Atlantic Metals Corporation Eckel Number 305

Prepared by: Tetra Tech EM Inc.

Location: 2117 East York Street, Philadelphia, Pennsylvania

Photographer: [REDACTED]

Photograph No. 1

Photograph Date: September 6, 2005

Description: View of the former lead smelter building facing south from the intersection of Martha and York Streets.



Photograph No. 2

Photograph Date: September 6, 2005

Description: Facing south from the intersection of Martha and Hagart Streets showing the vacant lot located adjacent to the north side of the smelter building.





Photographic Documentation

Site Name: Atlantic Metals Corporation Eckel Number 305

Prepared by: Tetra Tech EM Inc.

Location: 2117 East York Street, Philadelphia, Pennsylvania

Photographer: [REDACTED]

Photograph No. 3

Photograph Date: September 6, 2005

Description: Facing southwest from the intersection of Martha and York Streets showing an unidentified commercial/industrial property across the street from 2117 East York Street.



Photograph No. 4

Photograph Date: September 6, 2005

Description: Facing south from the intersection of Martha and Hagert Streets showing the front of the smelter building on the 2400 block of Martha St.





Photographic Documentation

Site Name: Atlantic Metals Corporation Eckel Number 305

Prepared by: Tetra Tech EM Inc.

Location: 2117 East York Street, Philadelphia, Pennsylvania

Photographer: [REDACTED]

Photograph No. 5

Photograph Date: September 6, 2005

Description: View of residential property located adjacent, to the south of the lead smelter.



Photograph No. 6

Photograph Date: September 6, 2005

Description: View of property located adjacent, to the south of the former lead smelter.





Photographic Documentation

Site Name: Atlantic Metals Corporation Eckel Number 305

Prepared by: Tetra Tech EM Inc.

Location: 2117 East York Street, Philadelphia, Pennsylvania

Photographer: [REDACTED]

Photograph No. 7

Photograph Date: September 6, 2005

Description: Facing north from the 2400 block of Frankford Avenue showing the lot to the rear of the lead smelter property.

